

Amendments to the claims:

Please cancel claims 82-92, without prejudice.

Following is a complete listing of the claims pending in the application, as amended:

1. (original) A method of cleaning a molybdenum mask having a series of metals deposited thereon, comprising:

placing the molybdenum mask in a cleaning solution including hydrochloric acid; and

removing the molybdenum mask from the cleaning solution after a predetermined period of time.

2. (original) The method of claim 1, further comprising:

agitating the cleaning solution at a predetermined agitation level for a predetermined period of time.

3. (original) The method of claim 2, further comprising:

putting the molybdenum mask in a container; and wherein

placing the molybdenum mask in the cleaning solution includes placing the container in the cleaning solution.

4. (original) The method of claim 3, further comprising:

closing the container.

5. (original) The method of claim 4, wherein:

the cleaning solution is contained within a first vessel;

the first vessel is contained within a second vessel; and

the second vessel further contains an aqueous solution surrounding the first vessel.

6. (original) The method of claim 5, further comprising:
covering the first vessel with a lid.

7. (original) The method of claim 6, further comprising:
drying the mask with nitrogen.

8. (original) The method of claim 7, further comprising:
washing the mask with de-ionized water.

9. (original) The method of claim 8, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration
of at least 5 percent.

10. (original) The method of claim 9, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration
of at least 15 percent.

11. (original) The method of claim 10, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration
of at least 25 percent and no more than 50 percent.

12. (original) The method of claim 11, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration
of about 37 percent.

13. (original) The method of claim 8, wherein:
the predetermined period of time is at least 5 minutes and no more than 300
minutes.

14. (original) The method of claim 13, wherein:
the predetermined period of time is at least 10 minutes and no more than 100 minutes.
15. (original) The method of claim 14, wherein:
the predetermined period of time is at least 15 minutes and no more than 40 minutes.
16. (original) The method of claim 15, wherein:
the predetermined period of time is at least 25 minutes and no more than 30 minutes.
17. (original) The method of claim 8, wherein:
the agitation level is quantified in terms of agitation frequency.
18. (original) The method of claim 17, wherein:
the agitation frequency is between 18 kHz and 2 MHz.
19. (original) The method of claim 18, wherein:
the agitation frequency is between 20 kHz and 1 MHz.
20. (original) The method of claim 19, wherein:
the agitation frequency is between 20 kHz and 100 kHz.
21. (original) The method of claim 20, wherein:
the agitation frequency is between 25 kHz and 50 kHz.
22. (original) The method of claim 8, wherein:
the agitation level is quantified in terms of agitation power.

23. (original) The method of claim 22, wherein:
the agitation power is between 1 W/gal and 100 W/gal.

24. (original) The method of claim 23, wherein:
the agitation power is between 2 W/gal and 50 W/gal.

25. (original) The method of claim 24, wherein:
the agitation power is between 5 W/gal and 40 W/gal.

26. (original) The method of claim 25, wherein:
the agitation power is between 10 W/gal and 30 W/gal.

27. (original) The method of claim 26, wherein:
the agitation power is between 20 W/gal and 30 W/gal.

28. (original) The method of claim 27, wherein:
the agitation power is about 25 W/gal.

29. (original) The method of claim 1, wherein:
the predetermined period of time is at least 5 hours and no more than 48 hours.

30. (original) The method of claim 1, wherein:
the molybdenum mask has a set of through holes.

31. (original) The method of claim 1, wherein:
the series of metals includes chrome, copper, gold and a lead/tin mixture.

32. (original) A method of cleaning a mask, comprising:
placing the mask in a cleaning solution; and

agitating the cleaning solution at a predetermined agitation level for a predetermined period of time.

33. (original) The method of claim 32, further comprising:
putting the mask in a container; and wherein
placing the mask in the cleaning solution includes placing the container in the cleaning solution.

34. (original) The method of claim 33, further comprising:
closing the container.

35. (original) The method of claim 34, further comprising:
receiving the mask.

36. (original) The method of claim 32, wherein:
the mask is a molybdenum mask.

37. (original) The method of claim 32, wherein:
the cleaning solution is a hydrochloric acid solution.

38. (original) The method of claim 37, wherein:
the cleaning solution is contained within a first vessel;
the first vessel is contained within a second vessel; and
the second vessel further contains an aqueous solution surrounding the first vessel.

39. (original) The method of claim 38, further comprising:
covering the first vessel with a lid.

40. (original) The method of claim 37, further comprising:
drying the mask with nitrogen.

41. (original) The method of claim 40, further comprising:
washing the mask with de-ionized water.

42. (original) The method of claim 37, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration
of at least 5 percent.

43. (original) The method of claim 42, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration
of at least 15 percent.

44. (original) The method of claim 43, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration
of at least 25 percent and no more than 50 percent.

45. (original) The method of claim 44, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration
of about 37 percent.

46. (original) The method of claim 37, wherein:
the predetermined period of time is at least 5 minutes and no more than 300
minutes.

47. (original) The method of claim 46, wherein:
the predetermined period of time is at least 10 minutes and no more than 100
minutes.

48. (original) The method of claim 47, wherein:
the predetermined period of time is at least 15 minutes and no more than 40
minutes.

49. (original) The method of claim 48, wherein:
the predetermined period of time is at least 25 minutes and no more than 30
minutes.

50. (original) The method of claim 46, wherein:
the predetermined period of time is at least 10 minutes and no more than 100
minutes.

51. (original) The method of claim 37, wherein:
the agitation level is quantified in terms of agitation frequency.

52. (original) The method of claim 51, wherein:
the agitation frequency is between 18 kHz and 2 MHz.

53. (original) The method of claim 52, wherein:
the agitation frequency is between 20 kHz and 1 MHz.

54. (original) The method of claim 53, wherein:
the agitation frequency is between 20 kHz and 100 kHz.

55. (original) The method of claim 54, wherein:
the agitation frequency is between 25 kHz and 50 kHz.

56. (original) The method of claim 55, wherein:
the agitation frequency is between 25 kHz and 40 kHz.

57. (original) The method of claim 37, wherein:
the agitation level is quantified in terms of agitation power.

58. (original) The method of claim 57, wherein:
the agitation power is between 1 W/gal and 100 W/gal.

59. (original) The method of claim 58, wherein:
the agitation power is between 2 W/gal and 50 W/gal.

60. (original) The method of claim 59, wherein:
the agitation power is between 5 W/gal and 40 W/gal.

61. (original) The method of claim 60, wherein:
the agitation power is between 10 W/gal and 30 W/gal.

62. (original) The method of claim 61, wherein:
the agitation power is between 20 W/gal and 30 W/gal.

63. (original) The method of claim 57, wherein:
the agitation power is about 25 W/gal.

64. (original) The method of claim 37, wherein:
the container is made of Teflon®.

65. (original) The method of claim 37, wherein:
the container is made of a material essentially inert with respect to hydrochloric acid.

66. (original) The method of claim 37, wherein:
the container is made of high-density polyethylene.

67. (original) The method of claim 37, wherein:
the method is performed within an environment having a temperature between
20 °C and 70 °C.

68. (original) The method of claim 67, wherein:
the method is performed within an environment having a temperature between
20 °C and 50 °C.

69. (original) The method of claim 68, wherein:
the method is performed within an environment having a temperature between
25 °C and 40 °C.

70. (original) The method of claim 68, wherein:
the method is performed within an environment having a temperature of about
25 °C.

71. (original) The method of claim 68, wherein:
the method is performed within an environment having a temperature of about
30 °C.

72. (original) The method of claim 68, wherein:
the method is performed within an environment having a temperature of about
40 °C.

73. (original) A method of cleaning a mask, comprising:
putting the mask in a container;
placing the container in a cleaning solution; and wherein
the cleaning solution is contained within a first vessel;
the first vessel is contained within a second vessel; and

the second vessel further contains an aqueous solution surrounding the first vessel.

74. (original) The method of claim 73, further comprising:
closing the container.

75. (original) The method of claim 74, further comprising:
covering the first vessel with a lid.

76. (original) The method of claim 75, further comprising:
washing the mask with de-ionized water.

77. (original) The method of claim 76, further comprising:
drying the mask with nitrogen.

78. (original) The method of claim 77, further comprising:
receiving the mask.

79. (original) The method of claim 73, wherein:
the cleaning solution is a hydrochloric acid solution.

80. (original) The method of claim 79, wherein:
the mask is a molybdenum mask.

81. (original) The method of claim 75, further comprising:
agitating the cleaning solution.

Claims 82-92 (canceled).

93. (original) A method of cleaning a molybdenum mask having a series of metals deposited thereon, comprising:

placing the molybdenum mask in a cleaning solution; and

removing the molybdenum mask from the cleaning solution after a predetermined period of time.

94. (original) The method of claim 93, further comprising:

agitating the cleaning solution at a predetermined agitation level for a predetermined period of time.

95. (original) The method of claim 94, further comprising:

putting the molybdenum mask in a container; and wherein

placing the molybdenum mask in the cleaning solution includes placing the container in the cleaning solution.

96. (original) The method of claim 95, further comprising:

closing the container.

97. (original) The method of claim 96, further comprising:

receiving the mask.

98. (original) The method of claim 93, wherein:

the cleaning solution is a hydrochloric acid solution.

99. (original) The method of claim 98, wherein:

the cleaning solution is contained within a first vessel;

the first vessel is contained within a second vessel; and

the second vessel further contains an aqueous solution surrounding the first vessel.

100. (original) The method of claim 99, further comprising:
covering the first vessel with a lid.

101. (original) The method of claim 100, further comprising:
drying the mask with nitrogen.

102. (original) The method of claim 101, further comprising:
washing the mask with de-ionized water.

103. (original) The method of claim 98, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration
of at least 5 percent.

104. (original) The method of claim 93, wherein:
the series of metals includes chrome, copper, gold and a lead/tin mixture.

105. (original) A method of cleaning a molybdenum mask having a series of
metals including chrome, copper, gold and a lead/tin mixture deposited thereon,
comprising:

placing the molybdenum mask in a cleaning solution; and
removing the molybdenum mask from the cleaning solution after a
predetermined period of time.

106. (original) The method of claim 105, further comprising:
agitating the cleaning solution at a predetermined agitation level for a
predetermined period of time.

107. (original) The method of claim 106, further comprising:
putting the molybdenum mask in a container; and wherein

placing the molybdenum mask in the cleaning solution includes placing the container in the cleaning solution.

108. (original) The method of claim 107, further comprising:
receiving the mask.

109. (original) The method of claim 105, wherein:
the cleaning solution is a hydrochloric acid solution.

110. (original) The method of claim 109, wherein:
the cleaning solution is contained within a first vessel;
the first vessel is contained within a second vessel; and
the second vessel further contains an aqueous solution surrounding the first vessel.

111. (original) The method of claim 110, further comprising:
covering the first vessel with a lid.

112. (original) The method of claim 111, further comprising:
drying the mask with nitrogen.

113. (original) The method of claim 112, further comprising:
washing the mask with de-ionized water.

114. (original) The method of claim 105, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration of at least 5 percent.

115. (original) The method of claim 113, wherein:
the cleaning solution is a hydrochloric acid solution having an acid concentration
of at least 5 percent.